

duly elected according to the laws, ordinances, and regulations of the Society for the ensuing year :

*President.*

George B. Wood.

*Vice-Presidents.*

John C. Cresson,  
Isaac Lea,  
George Sharswood.

*Secretaries.*

Charles B. Trego,  
E. Otis Kendall,  
John L. Le Conte,  
J. Peter Lesley.

*Members of the Council for Three Years.*

Frederick Fraley,  
Robert Patterson,  
Daniel R. Goodwin,  
Eli K. Price.

*Curators.*

Franklin Peale,  
Elias Durand,  
Joseph Carson.

*Treasurer.*

Charles B. Trego.

Prof. Lesley was nominated for Librarian.

Pending nominations Nos. 540 to 546 were read.

And the Society was adjourned.

*Stated Meeting, January 19, 1866.*

Present, fifteen members.

Dr. WOOD, President, in the Chair.

Letters acknowledging the receipt of publications were received from the following Societies :

Royal Society at Upsal, October 1st, 1865; K. K. Geogr. Reichs., Wein, September 22d, 1865; K. K. Geol. Gesell. Wein, October 10th, 1865; Royal Lombardy Institute, Milan, December 1st, 1862, August 27th, 1863; Linnean Society, London, July 26th, 1865; Society of Antiquaries, London, December 22d, 1865; American Antiquarian Society, Boston, January 11th, 1866; Corp. Yale College, New Haven, January 13th, 1866; Lyceum Natural History, New Jersey, January 10th, 1866; New Jersey Historical Society, Newark, January 5th, 1866; Academy of Sciences, St. Louis, December 23d, 1865.

Donations for the Library were announced from the London Linnean Society; the Trinity College Observatory, Dublin; Dr. Lloyd; the Boston Public Library; Silliman's Journal; Blanchard & Lea; the Franklin Institute; and Mr. Matthew Ryan, of Washington.

Mr. Cresson gave an account of a recent useful application of the principle of dia-magnetism first noticed by Faraday in 1845 at the close of his extended series of Experimental Researches in Electricity, but remaining unapplied and almost unnoticed for nearly twenty years.

According to Faraday's report to the Royal Society the force termed dia-magnetic gives rise to a repellant action between a magnet and various bodies previously supposed destitute of magnetic relations. This property was found in vegetable, animal, and earthy substances.

One of the phenomena exhibited in his experiments on these bodies is a discrimination in the attraction or repulsion exerted by a magnet, between substances placed near it in liquid suspension so as to be capable of free motion. The discriminating action is governed by the relative degree of repellant or attractive power belonging to the different bodies.

A result of this discrimination is to cause the particles most feebly repelled or most strongly attracted to come between the magnet and such other particles as are more strongly repelled or more feebly attracted; thus making the particles most feebly affected either by attraction or repulsion behave as if they belonged to the opposite magnetic class.

The practical use now made of this principle consists in imparting

inductive magnetism to the iron shell of a steam boiler by suspending within it a number of hardened steel permanent magnets. This has been found to effect the removal of sedimentary scale formed from the earthy salts held by the water, and to prevent the farther deposit of crystalline scale, so that boilers using water highly charged with calcareous matters are cleansed from adhering scale in a few weeks and kept clean.

Attention was called to the extraordinary high state of the barometer during the intensely cold weather of the 7th and 8th insts., viz.,  $31\frac{1}{4}$  to  $31\frac{1}{2}$  inches.

Prof. Lesley was elected Librarian for the ensuing year.

The Standing Committees were then appointed as follows :

*Finance.*—Mr. Fraley, Mr. J. F. James, Mr. Marsh.

*Publication.*—T. P. James, Mr. Trego, Mr. Carson, Mr. Price, Mr. Fraley.

*Hall.*—Mr. Peale, Mr. P. E. Chase, Mr. S. W. Roberts.

*Library.*—Dr. Bell, Dr. Coates, Mr. Price, Mr. Barnes, Mr. Briggs.

The list of surviving members was read. The number of members on the 1st January was 408, of whom 259 were resident in the United States, and 149 in foreign countries.

The Society proceeded to ballot for candidates for membership. Nomination No. 541 was postponed on account of the absence of members signing the recommendation. Pending nomination No. 547 and new nomination No. 548 were read.

Mr. Fraley offered the following resolution: That the Treasurer be and he is hereby authorized to have five hundred copies of the Laws of the Society printed in pamphlet form for the use of the members, and that on the election of any person as a resident member of the Society, a copy of the laws shall be sent to him with the notice of his election.

The ballot-boxes were opened and the following named gentlemen declared to be duly elected members:

Mr. Thomas S. Blair, of Pittsburg, Pa.

Prof. E. D. Cope, of Haverford College, Pa.

Prof. Horatio C. Wood, University of Penna.

Mr. George Davidson, of the U. S. Coast Survey.

Hon. Charles Hale, U. S. Consul at Alexandria.

Hon. William Strong, Supreme Court of Penna.

And the Society was adjourned.

---

*Stated Meeting, February 2, 1866.*

Present, fifteen members.

Dr. WOOD, President, in the Chair.

Letters accepting membership were received from Mr. George Davidson, dated Germantown, January 25th; from the Hon. William Strong, dated Philadelphia, January 31st; and from Prof. Edward D. Cope, dated Haverford College, January 31st, 1866.

Letters acknowledging publications were received from the Boston Society of Natural History, January 24th and May 1st, 1864; Boston Public Library, January 4th and January 22d, 1866.

Donations were received for the Library from the Royal Astronomical, and British Meteorological Societies, Trübner & Co., and Stevens & Bros., booksellers, London; Prof. Zantedeschi, of Padua; and the Boston S. N. History.

Dr. Coates announced the death of a member, Mr. George Ord, at his residence in Philadelphia, on the 24th inst., aged 85. Mr. Isaac Lea was appointed to prepare an obituary notice of the deceased.

Mr. Fraley announced the death of a member, Judge Oswald Thompson, at Germantown, on the 22d inst., aged 57. Mr. E. K. Price was appointed to prepare an obituary notice of the deceased.

Mr. Dubois exhibited to the Society some specimens of photography, which are chiefly remarkable as being the work of a Siamese artist, *Pra Wisut Yotamad*, a nobleman of high rank, and master of the Royal Mint at Bangkok. He understands no language but that of Siam, and learned the art at home. He has, however, an unusual aptitude for the higher class of mechanical arts, and for experiments in natural philosophy.